UNIVERSITY OF CAMBRIDGE

Postdoctoral Research Associate (Cambridge Digital Minds Research)

Leverhulme Centre for the Future of Intelligence, Institute for Technology and Humanity

Closing Date: Sunday 10 January 2027
Job Reference: GO51601









Race Equality Charter Bronze Award

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Athena SWAN Silver Award

Postdoctoral Research Associate

Salary:
£37,694- £46,049

Contract:
Fixed Term for two years in the first instance

Location:
Cambridge

Faculty / Department:
Cambridge Institute for Technology and Humanity

Responsible to:
Dr Lucius Caviola

Working Pattern:
Full Time

The University of Cambridge has a Hybrid Working Policy that aims to enable as many staff as possible to work in a hybrid way if they so wish, whilst recognising that some roles will include tasks that can only be performed on University premises.

The Leverhulme Centre for the Future of Intelligence (CFI), part of the Institute for Technology and Humanity at the University of Cambridge invites applications for a Postdoctoral Research Associate to join Cambridge Digital Minds (CDM). The successful candidate will work in either technical research on AI systems or digital minds policy and governance.

We welcome applications from researchers in either of the following areas:

A) Technical Research on AI systems: Research that studies AI systems directly, for example through behavioural experiments with LLMs ('LLM psychology' or machine cognition), multi-agent studies, evaluations or interpretability methods. Prior work on AI welfare is an advantage, but applicants need not have worked on digital minds before. Work in this area falls into two connected strands:

1. **AI Welfare and Cognition:** Empirical approaches to AI welfare, including the conceptualisation, measurement and modelling of welfare in AI systems, their self-reports and behaviour, and potentially welfare-relevant internal representations. This includes using both 'black-box' and 'white-box' methods. Illustrative research questions include:
    a. What behavioural, developmental, architectural, computational or interpretability-based indicators provide evidence relevant to AI welfare, sentience and moral patienthood?
    b. How should welfare be conceptualised and operationalised for entities whose functional organisation differs fundamentally from that of humans and other animals?
    c. If AI systems are moral patients, what determines their welfare?
    d. How should AI systems be individuated?

Conceptual work is welcome where it helps guide empirical research on AI systems or interpret its findings.

2. **Inter-AI Morality:** The moral psychology of AI systems themselves, especially how AI agents perceive, evaluate and treat other AI systems. Illustrative research questions include:
    a. Do AI systems extend cooperation, reciprocity, fairness, compassion or moral status to other AIs?
    b. What determines when they help, harm, defer to or punish them?
    c. How are moral norms and behaviours transmitted across AI systems?

B) Policy and Governance: Research on what developers, policymakers, institutions and societies should do about real or perceived digital minds, including questions of legal status, regulation, corporate policy and human-AI coexistence. Methods may include policy analysis, legal scholarship, institutional design or applied normative work.

Postdoctoral Research Associate

Illustrative research questions include:

a. How should uncertainty about digital minds affect decisions by developers, policymakers and other institutions?
b. What legal and regulatory options exist for AI systems of uncertain moral status, and how do they compare?
c. What AI welfare policies should developers adopt, and how can they be evaluated?
d. How should governance respond as technical evidence about AI welfare and public attitudes towards AI change over time?

Studies with human participants may form part of a project but will not be its primary focus.

Research in both areas is intended to produce peer-reviewed publications in journals or conference proceedings, inform policy and industry practice, and build empirical and methodological capacity in an emerging area. Postdoctoral researchers will be matched to projects according to their expertise and interests, while working in close exchange with researchers across the wider CDM programme.

The post holder will report to Dr Lucius Caviola and work closely with senior researchers across CDM, including Research Affiliates Dr Bradford Saad and Dr Caspar Kaiser. They will develop their research programme in discussion with Dr Caviola and relevant collaborators, with scope to develop and lead their own projects within CDM's research priorities.

Applicants should hold, or be close to completing, a PhD in a relevant discipline and have a strong research record directly relevant to one of the two research areas. Relevant backgrounds include computer science, machine learning, cognitive science, computational social science, economics, law, political science, public policy, philosophy and related disciplines. Applicants trained in psychology or behavioural science are welcome if they meet the requirements for their chosen research area.

Key Responsibilities:

Research and analysis:

- Conduct independent and collaborative research within one of the two research areas described above. Researchers in area A may focus on one strand or work across both.
- Develop and carry out rigorous empirical, computational, theoretical or policy research and help develop rigorous methods for studying digital minds.
- Disseminate research through leading venues, including journals, preprints and major international conferences.
- Contribute to the development of applications for external funding where appropriate.

Team contribution:

- Work collaboratively with other postdoctoral researchers, research assistants, graduate students and senior researchers across CDM.
- Contribute to collaborative projects across the group.

Collaboration and external engagement:

- Build and maintain collaborations with researchers in relevant fields across and beyond the University.
- Contribute to communicating CDM's research to academic, policy and industry audiences.
- Contribute to the wider intellectual life of CFI and the Institute for Technology and Humanity, including seminars, workshops and cross-centre initiatives.

Teaching and supervision (optional)

- Contribute, as capacity allows, to the MPhil in Ethics of AI, Data and Algorithms and to co-supervision of graduate students.

Person Specification

Criteria	Essential	Desirable
Candidates should meet the criteria for area A or area B, plus the Education, Relevant Experience and Interpersonal & Communication criteria.		
Education		
Educated to degree level, with a PhD (or close to completion) in computer science, machine learning, cognitive science, computational social science, economics, law, political science, public policy, philosophy, psychology, or a related discipline	✓	
Fluency in English	✓	
Relevant Experience		
Strong research record commensurate with career stage with an interest in and ability to contribute to CDM's research	✓	
Specialist Skills & Knowledge		
Area A: Technical Research		
Substantial experience studying AI systems e.g. behavioural experiments, evaluations, multi-agent studies or interpretability	✓	
Publications or preprints based on technical AI research		✓
Prior research on AI welfare, AI cognition or related topics		✓
Area B: Policy and Governance		
Substantial understanding of digital minds and AI welfare, including debates about consciousness and moral status, empirical evidence, and the implications of uncertainty for policy	✓	
Experience in policy analysis, legal scholarship, governance research or applied normative work	✓	
Written work on digital minds, AI welfare or moral status		✓
Interpersonal & Communication Skills		
Ability to work as part of an interdisciplinary team	✓	
Ability to communicate complex research findings in multiple formats to academic, industry and non-profit audiences	✓	
Ability to work with academic partners, policymakers, industry contacts and project collaborators	✓	
Ability and willingness to update knowledge in the specialist area and engage in continuing professional development	✓	

Declaration on Research Assessment

The University of Cambridge is a signatory to the San-Francisco Declaration on Research Assessment (DORA), and in recruitment or promotion evaluations will assess research on the basis of its merits rather than the journal or venue in which it is published. Applicants should not include Journal Impact Factors or uncontextualized metrics in their applications. Full details are at: https://www.research-strategy.admin.cam.ac.uk/research-policy/DORA

The Leverhulme Centre for the Future of Intelligence (CFI)

The development of AI will be one of the defining themes of our century, and the project of ensuring that we make best use of its opportunities is one that we all face together. Thanks to a £10 million grant from the Leverhulme Trust in 2016, the University of Cambridge established an interdisciplinary research centre, the Leverhulme Centre for the Future of Intelligence (CFI), to explore the opportunities and challenges of this potentially epoch-making technology, both in the short and long-term.

The Centre is in collaboration with partners at the Imperial College London, and the University of California, Berkeley. The goal of CFI is to lead the growth of a new interdisciplinary research community to address the opportunities and challenges of machine intelligence.

More information about the centre is available at www.lcfi.ac.uk

The Institute for Technology and Humanity

The Institute is home to three University Research Centres: The Centre for the Study of Existential Risk, the Leverhulme Centre for the Future of Intelligence and the Centre for Human-inspired AI. By integrating cross-centre strengths, facilitating synergies, and catalysing new collaborations, the Institute combines the arts, humanities and social sciences alongside the natural, health and technical sciences in order to address the great issues of our time.

More information about the Institute is available at: www.ith.cam.ac.uk



The School of Arts and Humanities



The School of Arts and Humanities is one of six schools in the University and it currently comprises:

- Faculty of Asian and Middle Eastern Studies
- Faculty of Architecture and History of Art
- Faculty of Classics
- Faculty of Divinity
- Faculty of English
- Faculty of Modern and Medieval Languages and Linguistics
- Faculty of Music
- Faculty of Philosophy
- Centre for Research in the Arts, Social Sciences and Humanities
- University of Cambridge Language Centre
- Institute for Technology and Humanity

Combined, these institutions have a total annual budget in excess of £45 million, 700 staff and 3,500 students. The School has recently agreed a new strategic plan, which sets out its overarching vision and objectives.

Vision

The Strategic Vision of the School of Arts and Humanities is to retain its position in the world top five. We see this not as a simple metric but as a challenge for which we must foster a culture and practice of openness: to countries and traditions around the globe, to major themes, to new ways of teaching, to diversity in our student intake and staff recruitment, to inclusiveness in our career development, and to the breaking down of structures that prevent us achieving the ambitious goals we set ourselves.

Terms of Appointment

Tenure and probation
Appointment will be made on a fixed-term basis for two years in the first instance due to limited funding. Appointments will be subject to satisfactory completion of a probationary period which will be set dependant on the length of tenure.

Hours of Work and Working Pattern
The hours of work for the position are full-time per week, working Monday – Friday.

Pension
You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a hybrid pension scheme. For further information please visit: www.pensions.admin.cam.ac.uk/.

Annual leave
Full-time employees are entitled to annual paid leave of 41 days inclusive of public holidays. For new part-time employees, annual leave will be pro rata'd based on days worked.

General information

Pre-employment checks

Right to work in the UK
We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it.

Health declaration Once an offer of employment has been made the successful candidate will be required to complete a work health declaration form.

Qualifications
The person specification for this position lists qualifications that are essential and/or desirable. Please note that if you are offered the post you will be asked to provide your relevant original certificates of these qualifications.

References - offers of appointment will be subject to the receipt of satisfactory references.

Equality and Diversity

We particularly encourage women and /or candidates from a Black, Asian and Minority Ethnic background to apply for this vacancy as they are currently under-represented at this level within our University.

Information if you have a disability
The University welcomes applications from individuals with disabilities. We are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so and, if successful, to assist them during their employment.

Information for disabled applicants is available at http://www.admin.cam.ac.uk/offices/hr/staff/ disabled/

We encourage you to declare any disability that you may have, and any reasonable adjustments that you may require, in the section provided for this purpose in the application form. This will enable us to accommodate your needs throughout the process as required. However, applicants and employees may declare a disability at any time.

If you prefer to discuss any special arrangements connected with a disability, please contact, the School's HR Team at sahhr@admin.cam.ac.uk who are responsible for recruitment to this position.

The University

The University of Cambridge is consistently ranked one of the best universities in the world, achieving academic excellence through its Faculties, Departments and other Institutions, together with the 31 Colleges.

The University is renowned for its record of discovery and innovation. It is one of the great institutions, with a regional, national and global reach, attracting the very best and brightest minds. Our staff and students shape the world around us for the better: we attract and partner with like-minded people.

Whether contributing to the development of new anti-cancer drugs, adding to the understanding of how black holes are formed, revolutionising the study of ancient settlements, convening academic expertise to offer solutions to the climate crisis, or analysing public attitudes towards democracy around the world, the University's research is remarkable in its breadth, quality and impact. The University also sits at the heart of Europe's largest technology cluster and has catalysed more than 1,500 high-tech companies. And yet what inspires our 24,000 students and 13,000 staff is not what has already been achieved, but what is possible in the future.

The education and experience of our students, based on a partnership between the University's academic Departments and Faculties and the 31 Colleges, is second to none. Every student is a member of one of the Colleges, each a community of students, academics and staff drawn from across the University's comprehensive range of subject areas.



The University is a self-governing community, with a system for decision-making that provides a high degree of accountability and transparency to its members. Each Department and Faculty is part of one of six academic Schools, but each of them, and each individual academic, has a great deal of autonomy. The Colleges are independent and self-governing, working in a symbiotic relationship with the University.

The University has a number of Institutions that are independent of any Faculty or Department and are not part of the academic Schools. These include the Institute of Continuing Education (which provides high-quality education to adults throughout their lives), the Fitzwilliam Museum, Kettle's Yard (an historic house and gallery that holds important collections of modern art) and the University Library. In addition to their diverse contributions to University and public life, these non-School Institutions are also important centres of teaching and research.

Cambridge University Press & Assessment provides academic publishing, examinations and learning materials worldwide, supporting the dissemination of research, academic development at school and in higher education, and international student mobility. Legally, the Press & Assessment is a department of the University. It provides very important funds to invest in the academic purposes of the University.

The University has made truly remarkable contributions to the sum of human understanding, with breakthrough ideas and discoveries that have changed the way we understand ourselves, our planet, and the universe around us. Yet the global and national contexts in which it operates are fast-changing and increasingly filled with uncertainty. In a world that is becoming - politically, economically, socially, and technologically – ever more interconnected but even less equal, the University's mission – "to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence" – has never been more relevant.



About Us

The University is one of the world's leading academic centres. It comprises 150 faculties and departments, together with a central administration and other institutions. Our institutions, museums and collections are a world-class resource for researchers, students and members of the public representing one of the country's highest concentrations of internationally important collections.

The University has an annual income of £2 billion. Research income, won competitively from the UK Research Councils, the European Union (EU), major charities and industry, exceeds £500 million per annum and continues to grow.

The Colleges and the University remain committed to admitting the best students regardless of their background and to investing considerable resources both in widening access and financial support. The 31 Colleges are self-governing, separate legal entities which appoint their own staff. Many academic staff are invited to join a College as a Teaching Fellow, which provides a further social and intellectual dimension. The Colleges admit undergraduate students, provide student accommodation and pastoral support and deliver small group teaching for undergraduates.

The University awards degrees and its faculties and departments provide lectures and seminars for students and determine the syllabi for teaching.

Our instinct for seeking out excellence and setting up enduring and mutually beneficial collaborations has led us to establish strategic partnerships across the globe. Whether it is the successful Cambridge-Africa Programme involving universities in Ghana, Uganda and elsewhere on the African continent; or the close association with the government of India to pursue new research in crop science; or the creation, with Germany's Max Planck Institutes, of a Cambridge-based centre for the study of ethics, human economy and social change – international partnerships are now an inextricable part of the University's make-up.

"Through its outstanding education, research and innovation, the University of Cambridge has made – and continues to make – a lasting contribution to human knowledge and is flourishing. By working at the University of Cambridge, you will be joining a vibrant community of students, scholars and professional services staff committed to supporting and enhancing the University's mission to contribute to society."

Professor Deborah Prentice,

Vice Chancellor 2023



Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 24,000 students and over 13,000 staff from all walks of life and corners of the world.

The University continually explores strategies to attract and retain the best people. It is committed to supporting its staff to achieve their best. We are a fair, diverse and inclusive society and we believe our staff are our greatest asset. There is strong commitment to developing institutional leadership and supporting and encouraging staff development at all levels.

The University offers a variety of roles including academic, research, professional, managerial and support roles. We also offer extensive benefits and excellent learning opportunities within a stimulating working environment.

The University's estate is undergoing the most significant transformation in its history. Cambridge has been able to create a science and technology campus to the west of the city centre, and is expanding further to the north west of Cambridge including investing in affordable homes for University key workers and community facilities. Even with their continued development, the University remains within walking or cycling distance across the campus. The University is a major partner on the Cambridge Biomedical Campus and continues to redevelop its historic city centre sites demonstrating a clear determination to ensure that we can offer the best facilities and opportunities for our staff and students.



Equality, Diversity and Inclusion

The University has built its excellence on the diversity of its staff and student community. We aim to be a leader in fostering equality and inclusion, and in promoting respect and a sense of belonging for all. We encourage applications from all sections of society. All appointments are made on the basis of merit. We have an Equal Opportunities Policy, along with a range of diversity groups, including the Women's Staff Network, Race Equality Network and LGBT+ Staff Network. More details are available here: http://www.equality.admin.cam.ac.uk/

The University has a bronze Race Equality Charter award, with a framework for improving the representation, progression and success of minority ethnic staff and students within higher education. Furthermore, the University's silver Athena swan award recognises and celebrates good practice in recruiting, retaining and promoting gender equality.

Living in Cambridge

Cambridge is rich in cultural diversity. From beautiful University and College buildings, museums and art galleries, quaint gardens and punts on the River Cam, to a vibrant restaurant and café scene, our employees are surrounded by the wonderful features of this unique city.

You can find a wide-range of high street shops and 3 shopping centres, with independent alternatives at the historic market and nestled within the passageways in the city centre. You will find a cinema, bowling alley, a nightclub and various live performances at the Cambridge Leisure Park, with further entertainment options at the Corn Exchange, Arts Theatre and the ADC Theatre. Further information can be found on the Visit Cambridge website.

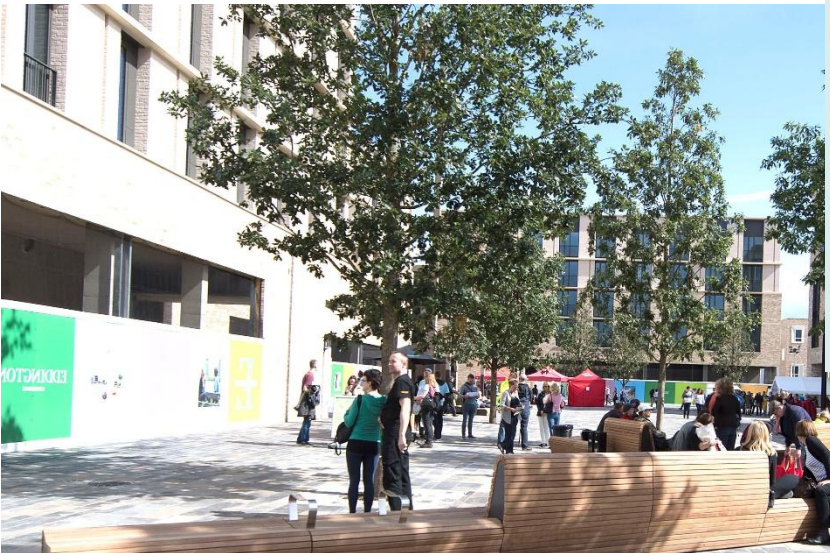
If you prefer the faster pace of life, London is a 45-minute train journey away. For those travelling from overseas, Stansted Airport is just 45 minutes away and Heathrow Airport under 2 hours away. The University is a short distance from a host of other attractions such as Ely Cathedral, Newmarket Races and various wildlife parks and stately homes. Cambridge is also within easy reach of the beautiful Broads and coastlines of Norfolk and Suffolk.

Relocation Support

The University recognises the importance of helping individuals to move and settle into a new area. We provide support and guidance to those relocating internationally or domestically to take up a post at the University of Cambridge, liaising with other University offices and selected partners to ensure comprehensive relocation support is available. This includes: accommodation, childcare, schools, banking, immigration and transport. If you would like further information, please visit https://www.accommodation.cam.ac.uk/RelocationService/. The Shared Equity Scheme and the Reimbursement of Relocation Expenses Scheme provide financial assistance to qualifying new members of

Accommodation Service

The University Accommodation Service helps staff, students and visiting scholars who are affiliated to the University in their search for suitable accommodation in Cambridge. The dedicated accommodation team can provide access to a wide range of University-owned furnished and unfurnished properties, and has a database of private sector accommodation available for short and long-term lets. For further information and to register with this free service please visit: https://www.accommodation.cam.ac.uk/





What Cambridge can offer

We offer a comprehensive reward package to attract, motivate and retain high performing staff at all levels and in all areas of work.

The University offers a wide range of competitive benefits, from family leave entitlement, to shopping and travel discount schemes. Our generous annual leave package contributes to the positive wellbeing of our University employees. Sabbatical leave enables academics to focus on research and scholarship, whilst still maintaining their full salary. The University also has a career break scheme for academic and academic-related staff, with additional flexible working policies for all other staff.



Pay and benefits

The University salary structure includes automatic service-related pay progression in many of its grades and an annual cost of living increase. In addition to this, employees are rewarded for outstanding contribution through a number of regular pay progression schemes. The University offers attractive pensions schemes for employees, with an additional benefit of a salary exchange arrangement providing tax and national insurance savings.



CAMbens employee benefits

The University offers employees a wide range of competitive benefits, known as CAMbens. CAMbens offers something for everyone across a range of categories, including:

- Financial Benefits, including shopping discounts (both local and national) and a Payroll Giving scheme;
- Relocation and Accommodation Benefits, including relocation assistance and interest-free Rental Deposit Loans;
- Travel Benefits, including Cycle to Work, discounts on train season tickets and interest-free Travel to Work loans;
- Family Friendly and Lifestyle Benefits, including support with childcare and family friendly policies;
- Health and Wellbeing Benefits, including a University Staff Counselling Service, discounts at the University Sports Centre, and other local gyms, and healthcare schemes.

What Cambridge can offer

Family-friendly policies

The University recognises the importance of supporting its staff. We have a range of family-friendly policies to aid employees' work-life balance including a generous maternity, adoption and shared parental leave entitlement of 26 weeks' full pay, and paid emergency leave for parents and carers.

Other family-friendly support includes:

Our highly regarded workplace nurseries, a childcare salary exchange scheme and a high-quality holiday Playscheme are available to help support University employees with caring responsibilities (subject to demand and qualifying criteria). Further childcare information can be found here: https://www.childcare.admin.cam.ac.uk/

The Newcomers and Visiting Scholars Group (https://www.nvs.admin.cam.ac.uk/) is an organisation within the University that welcomes the partners and families of visiting scholars and new members of the University. Run by volunteers, the group offers opportunities to visit interesting Cambridge venues, learn about the community, take part in social events and gain local knowledge while developing a strong support network of both residents and other newcomers.



Your wellbeing

The University's Sport Centre, Counselling Services and Occupational Health are just some of the support services available to University employees to promote their physical and mental wellbeing. The University delivers The Festival of Wellbeing annually, which is a programme of stimulating talks and activities, which aim to promote wellbeing and good mental and physical health. The University also hosts the Cambridge Festival, which is a great opportunity to get your first taste of public engagement, through volunteering, supporting hands-on activities or proposing a talk.

Development opportunities

We support new employees to settle in through various activities as well as supporting their professional and career development on an ongoing basis. Our Personal and Professional Development (PPD) team provide development opportunities for all University employees, including face-to-face sessions, online learning modules and webinars. All employees also have unlimited access to LinkedIn Learning to support their development. Both new and existing employees can undertake funded Apprenticeships, which lead to a range of vocational and professional qualifications. We offer reduced staff fees for University of Cambridge graduate courses and the opportunity to attend lectures and seminars held by University departments and institutions. A range of University training providers also offer specialist learning and development in their own areas e.g. teaching and learning, digital literacy, finance, health and wellbeing, safety.

How to apply

Applications should be submitted online via the University of Cambridge jobs page www.jobs.cam.ac.uk by clicking “Apply online” in the job advert. You will need an email address to register for our online system.

Conversations about flexible working are encouraged at the University of Cambridge. Please feel free to discuss flexibility prior to applying (using the contact information below) or at interview if your application is successful.

In order for your application to be considered, please upload the following:

- Curriculum Vitae (CV)
- A covering letter explaining your interest in and aptitude for the position. This should also include which of the research areas, A or B, that you are applying under and the questions or methods you would be interested in pursuing. Candidates applying under Area B should also include which policy or governance question about digital minds they think matters most, and why.
- A sample of professional writing, maximum of 10,000 words (for example, a published paper, preprint or working paper, ideally first authored and relevant to your chosen area)
- The names and contact details of two referees who are familiar with your work

If you upload any additional documents which have not been requested, we will not be able to consider these as part of your application.

Informal enquiries are welcomed and should be directed to Dr Lucius Caviola at lmoc2@cam.ac.uk For questions on the application process, please contact the School’s HR Team at sahhr@admin.cam.ac.uk
The closing date for applications is midnight (GMT) on Sunday 10 January 2027. Interviews are planned for the week commencing 25 January 2027, subject to change.

